Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method of dynamically managing a computer system having a plurality of processors, comprising:

identifying a first set of computer-readable instructions ~~whose processing is to be managed~~;

assigning the first set of computer-readable instructions to at least one of said plurality of processors ~~where said first set of computer-readable instructions can execute~~ using an affinity mask; and

automatically adjusting the number of processors ~~where~~ assigned to said first set of instructions ~~can execute~~ by adding or ~~deleting~~ removing a processor ~~that said first set of instructions can execute on~~ to or from the affinity mask based on processor usage in the system, the processor being removed from the affinity mask in a reverse order that the processor is added to the affinity mask.

2. (original) The method of claim 1 wherein the first set of computer-readable instructions comprise a computing thread.

3. (original) The method of claim 1 wherein the first set of computer-readable instructions comprise an application program.

4. (original) The method of claim 1 wherein the processor usage is based on the CPU utilization for the computer-readable instructions.

5. (currently amended) The method of claim 4 wherein the CPU utilization is normalized for the CPUs in the number of processors eligible to execute ~~that~~ the first set of instructions ~~can run on~~.

6. (currently amended) The method ~~as recited in~~ of claim 1 further comprising identifying a second set of computer-readable instructions wherein said first set of computer-

readable instructions and said second set of computer-readable instructions comprise an application group.

7. (currently amended) The method ~~as recited in~~ of claim 6 wherein the application group is assigned to a common set of processors whose number is automatically adjusted.

8. (currently amended) The method ~~as recited in~~ of claim 1 wherein said first set of computer readable instructions are elevated in priority class before estimating the processor usage.

9. (currently amended) The method ~~as recited in~~ of claim 1 wherein the processor usage comprises an average processor usage taken over a predefined interval.

10. (currently amended) The method ~~as recited in~~ of claim 1 where the act of automatically adjusting the number of processors compares the processor usage to a threshold value.

11. (currently amended) The method ~~as recited in~~ of claim 10 wherein the threshold value for adding a processor is above about 85% of CPU utilization on the processors that the first set of instructions is executing on.

12. (currently amended) The method ~~as recited in~~ of claim 10 wherein the threshold value is for deleting a processor is below about 65% of CPU utilization on the processors that the first set of instructions is executing on.

13. (currently amended) A system for dynamically managing a computer system having a plurality of processors, comprising ~~the steps of~~:

at least one processor;

a computer memory device in communication with said at least one processor bearing computer computer-executable instructions capable of identifying a first set of computer-readable instructions ~~whose processing is to be managed~~;

a computer memory device in communication with said at least one processor bearing computer-executable instructions capable of assigning the first set of computer-readable instructions to at least one of said plurality of processors ~~where said first set of computer-readable instructions can execute~~; and

a computer memory device in communication with said at least one processor bearing computer-executable instructions capable of automatically adjusting the number of processors ~~where~~ assigned to said first set of instructions ~~can execute~~ by adding or ~~deleting~~ removing a processor ~~that said first set of instructions can execute on~~ to or from the affinity mask based on processor usage in the system, the processor being removed from the affinity mask in a reverse order that the processor is added to the affinity mask.

14. (original) The system of claim 13 wherein the first set of computer-readable instructions comprise a computing thread.

15. (original) The system of claim 13 wherein the first set of computer-readable instructions comprise an application program.

16. (original) The system of claim 13 wherein the processor usage is based on the CPU utilization for the computer-readable instructions.

17. (currently amended) The system of claim 16 wherein the CPU utilization is normalized for the CPUs in the number of processors ~~that~~ eligible to execute the first set of instructions ~~can run on~~.

18. (currently amended) The system of claim 13 further comprising a computer memory device in communication with said at least one processor bearing computer executable instruction capable of identifying a second set of computer-readable instructions wherein said first set of computer-readable instructions and said second set of computer-readable instructions comprise an application group.

19. (original) The system of claim 18 wherein the application group is assigned to a common set of processors whose number is automatically adjusted.

20. (currently amended) The system of claim 13 wherein said first set of computer readable instructions are elevated in priority class before estimating the processor usage.

21. (original) The system of claim 13 wherein the processor usage comprises an average processor usage taken over a predefined interval.

22. (original) The system of claim 13 where the computer memory device bearing computer-executable instructions capable of automatically adjusting the number of processors is capable comparing the processor usage to a threshold value.

23. (currently amended) ~~At least one~~ An article of manufacture comprising:

a computer-readable storage medium bearing computer-readable instructions of dynamically managing a computer system having a plurality of processors, comprising:

instructions for identifying a first set of computer-readable instructions ~~whose processing is to be managed~~;

instructions for assigning the first set of computer-readable instructions to at least one of said plurality of processors ~~where said first set of computer-readable instructions can execute~~; and

instructions for automatically adjusting the number of processors ~~where~~ assigned to said first set of instructions ~~can execute~~ by adding or ~~deleting~~ removing a processor ~~that said first set of instructions can execute on~~ to or from the affinity mask based on processor usage in the system, the processor being removed from the affinity mask in a reverse order that the processor is added to the affinity mask.

24. (currently amended) The ~~computer-readable medium~~ article of manufacture of claim 23 wherein the first set of computer-readable instructions comprise a computing thread.

25. (currently amended) The ~~computer-readable medium~~ article of manufacture of claim 23 wherein the first set of computer-readable instructions comprise an application program.

26. (currently amended) The ~~computer-readable medium~~ article of manufacture of claim 23 wherein the processor usage is based on the CPU utilization for the computer-readable instructions.

27. (currently amended) The ~~computer-readable medium~~ article of manufacture of claim 26 wherein the CPU utilization is normalized for the CPUs in the number of processors ~~that~~ eligible to execute the first set of instructions ~~can run on~~.

28. (currently amended) The ~~computer-readable medium~~ article of manufacture of claim 26 comprising instructions for identifying a second set of computer-readable instructions wherein said first set of computer-readable instructions and said second set of computer-readable instructions comprise an application group.

29. (currently amended) The ~~computer-readable medium~~ article of manufacture of claim 28 wherein the application group is assigned to a common set of processors whose number is automatically adjusted.

30. (currently amended) The ~~computer-readable medium~~ article of manufacture of claim 23 comprising instructions for elevating said first set of computer readable instructions in priority class before estimating the processor usage.

31. (currently amended) The ~~computer-readable medium~~ article of manufacture of claim 23 wherein the processor usage comprises an average processor usage taken over a predefined interval.

32. (currently amended) The ~~computer-readable medium~~ article of manufacture of claim 23 where the instructions for automatically adjusting the number of processors compares the processor usage to a threshold value.